

AAB UNIVERSITY

Lecture 1

Use of technology in translation process

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ORGANIZATION:

- 2 hours per week (2x45 min)
- 2 tests (2 x 35 % = 70%)
- Project 20 %
- 10 % presence

Introduction

- Translators and teachers of translation have been pioneers in the use of the computer as a tool that is fully integrated into the work process
- The relationship between translation and computers began with the development of software for machine translation

Introduction

- The real boom of translation technologies started with the development of:
 - Electronic dictionaries and
 - Terminology databases
- The arrival of the Internet with its numerous possibilities for research, documentation and communication, and computer assisted translation tools. ..

HOW USEFUL IS TRANSLATION TECHNOLOGY FOR THE 21ST CENTURY TRANSLATOR?

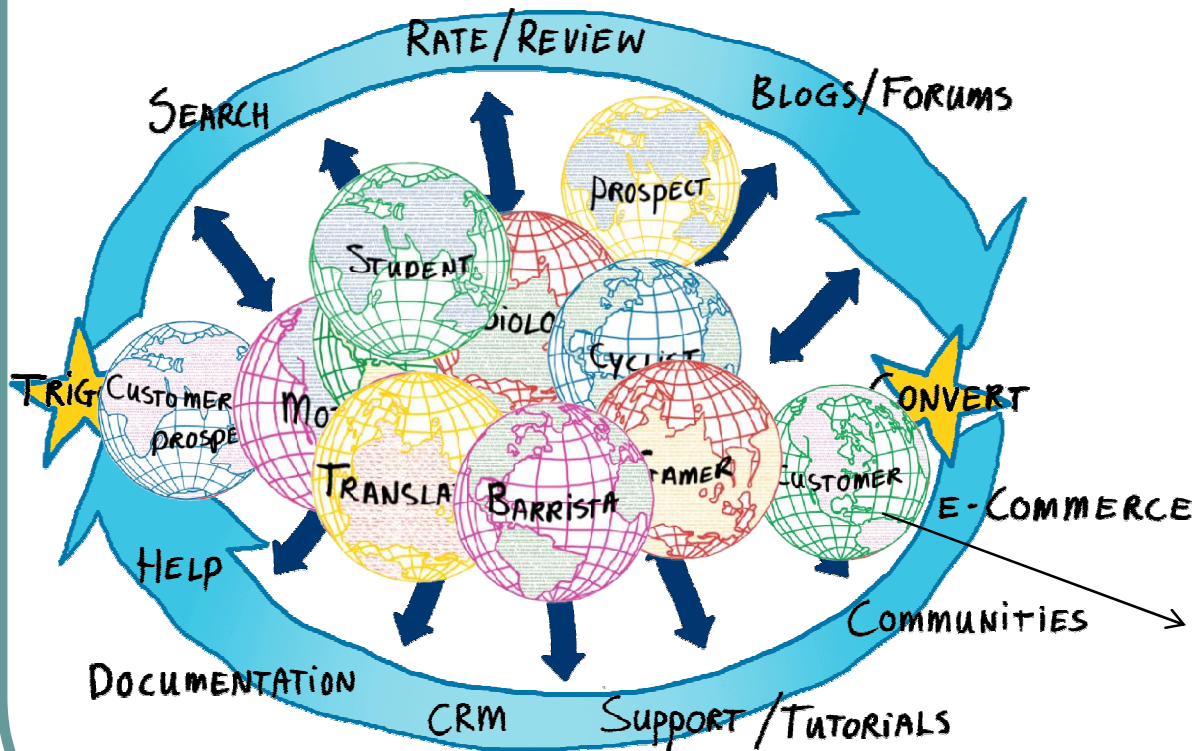
Vision Statement

- Translation is a standard - a ubiquitous service.
- Like the **internet**, **electricity**, and **water**, **translation** is one of the basic needs of human civilization.

21st Century Translation

Bottom-up and top-down globalization

Information is omnipresent – people are connecting

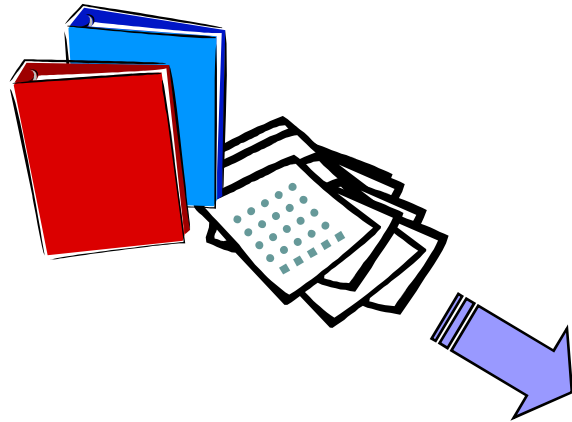


1. Quality differentiation
2. Unlimited languages
3. Data is core
4. Continuous translation
5. **Collaborative translation**

One Community world!

Many big worlds in one small planet

Translation Paradigm (80s into early 90s)



✱ text for paper-based circulation

✱ work in isolation

✱ word-processing

✱ asynchronous

✱ no engineering input



Historical Developments of Translation Technology (TT)

ICT Development 1990s

- penetration of PCs
 - Desktop publishing
- speech recognition (the translation of spoken words into text)
- PCs connected via modem
- telework
- Internet (Web)
- Sony PlayStation
- Google
- mobile phones -texting



TT Development

- software localisation services
- localisation tools
- data-driven MT
- free WebMT (1997: Babelfish)
- web localisation services
- Translation Memory

Translation Technology tools mean...(1)

- **Advanced Word Processing functions**
 - complex file management
 - understanding and manipulating complex file types
 - multilingual word processing
 - configuring templates and using tools such as using AutoText.
- **Information on the WWW**
- **Translation Memory Systems**
- **Machine Translation**

Translation Technology tools mean (2)

- Software and Web Localisation
- Text Alignment
- XML and the Localisation Process....
and much, much more.

Web Searching (1)

- With increasing globalisation, and rapid changes in the political and economic world in which translators work, we are faced with all sort of things which we cannot find in our dictionary, starting from neologisms and acronyms to new concepts, organisations and institutions.

Web wonders

- Given the continued explosive increase in the size of the Web, the trend toward business organisations that cross national boundaries, and high levels of competition for consumers in a global marketplace, it seems impossible not to view multilingual content on the Web as an expanding resource.
- Moreover it is a dynamic resource, changing in content as the world changes.'

Internet usage in Kosova

- Almost 80% of Kosovo internet users are utilizing the internet for communications; web searching, translation purposes etc.
- Kosovo citizens use the internet at least as European citizens, if not more.
- The study found that 86.8% of Kosovo internet users are using it on at least on a daily basis.

The role of digitalization in translation process

- In Kosova, the digitization process started with "computerization" of institutions, organizations, private business, professional work places, etc...
- The computer has been an integrated part of the infrastructure needed by translators for some time now, but the amount of knowledge and the skills linked to the translation technologies that the translator has to acquire and have a command of is growing every day.

The role of digitalization in translation process (2)

- Internet have given rise to a new specialized area called localization.
- **Localization** involves taking a product and making it linguistically and culturally appropriate to the target locale (country/region and language) where it will be used and sold.”

The role of digitalization in translation process (3)

- The translation process is complex and is made up of many sub-processes and tasks of different natures.
- Numerous computer tools can, or could, be used to enhance:
 - **Efficiency**
 - **Speed**
 - **Quality**

The role of digitalization in translation process (4)

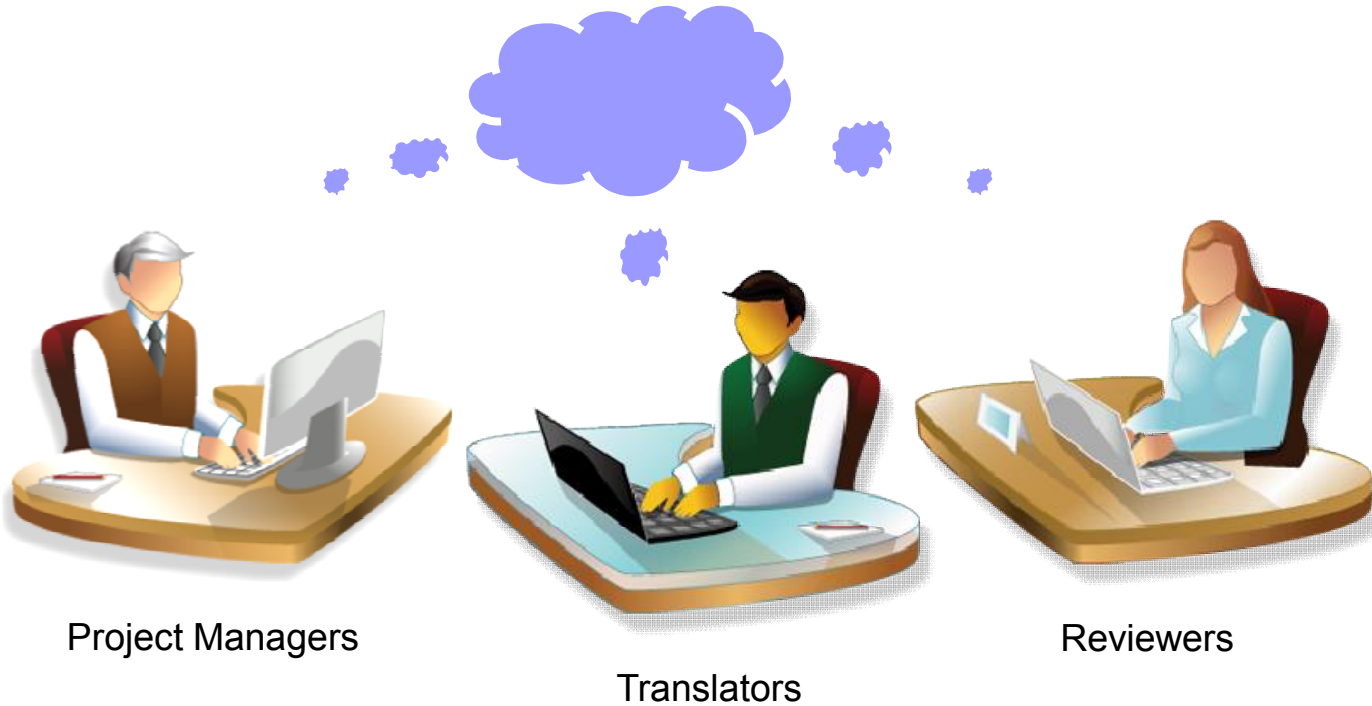
- Regardless of the name, we are now at a point where it is becoming essential to draw up a set of principles that help define the limits of the field of study and to select its content.
- We also need to establish criteria that can help us to classify and structure this new field and this in turn would contribute to its academic development and its spread throughout the professional and educational domains.

Key technology advances...

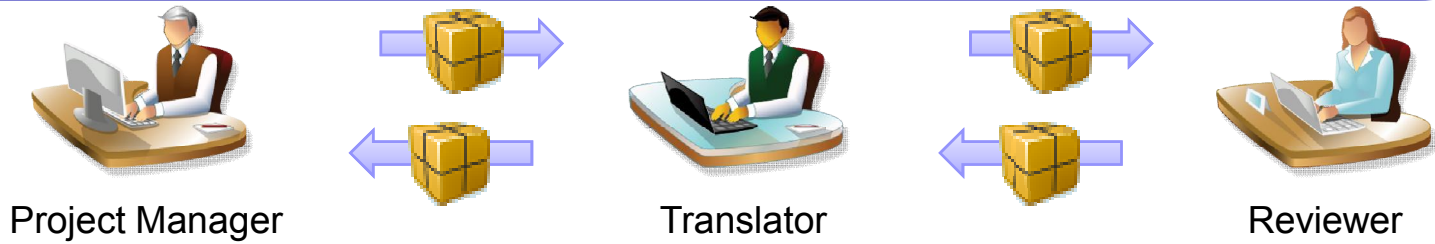
- The key technology advances are in the area of **sub segment** reuse and machine translation (MT)
- The actual productivity gains for a Professional Translator relate to the ergonomics of how systems allow users to interact, control and automate the various data sources:
 - Access, creation, weighting and sharing of TMs
 - Access to MT pointing to specific engines
 - Compilation of phrase dictionaries

What Happens When Teams Grow?

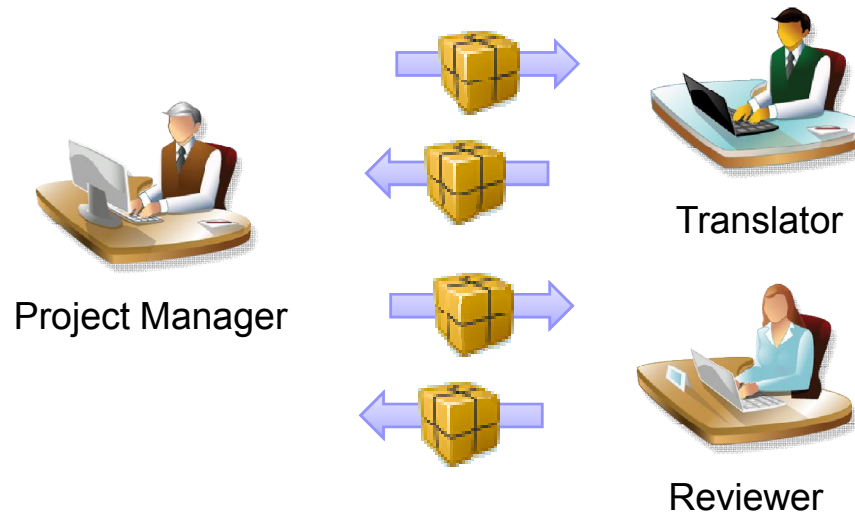
When teams of three or more work together, new factors must be considered to work effectively and properly collaborate



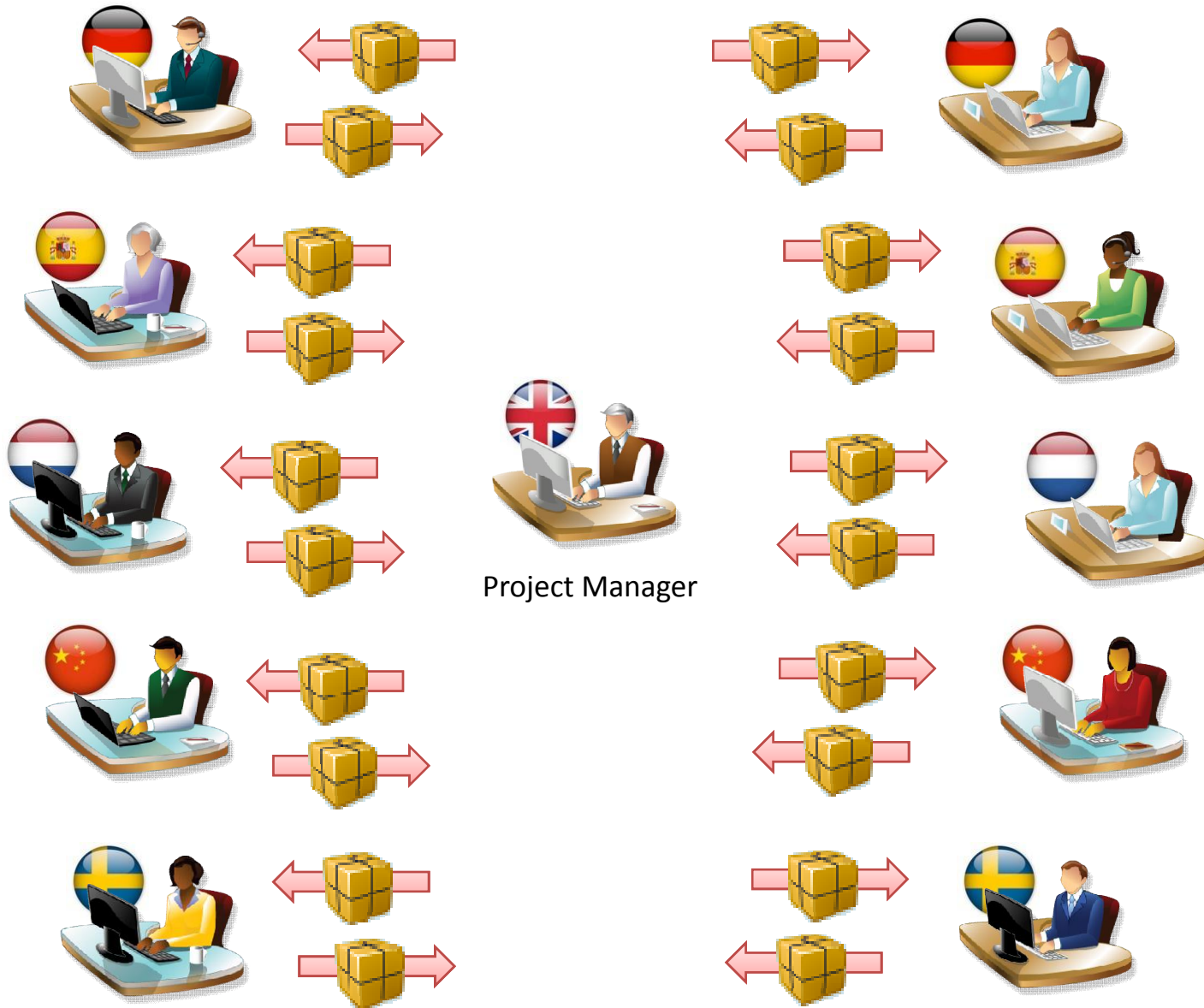
Typical Package-based Workflows



or



...x 5 languages...



Different approaches to structuring the computer applications related to translation

- The literature offers several ways of structuring the computer applications related to translation, each of which respond to different criteria or approaches.
- The most classical structure is that which divides translation software into two large branches:
 1. *Machine Translation (MT) and*
 2. *Computer Assisted Translation (CAT)*

Computer applications related to translation (1)

- The steady growth of the field and the rise in the number of tools and resources over the past twenty years have, however, led to the creation of subdivisions within these two branches.

Computer applications related to translation (2)

- Furthermore, the greater attention currently being paid to this field has multiplied the number of points of view from which it can be analyzed.
- It is also to be expected that the divisions existing today will, in the future, expand and become more substantial.

Computer applications related to translation (3)

- **Some of the perspectives taken as starting points include the following:**
 1. *According to the degree of automation in the translation process*
 2. *According to the moment in which the tools are used in the translation process*
 3. *According to the level of knowledge about computing required*

Computer applications related to translation (4)

4. *According to their relationship with translation*
 5. *According to the dimension of translation the computer tool is applied to*
- In the subsections that follow we will outline these different proposals for dividing the field in more detail, since they help us to establish the content of the discipline.

Automation of the translation process

- The most important part is automation of translation process
- Figure 1 reproduces the scale developed by Hutchins and Somers to measure the extent to which the translation process is automated when using the computer tool.

Automation of the translation process

- Translation process is automated when using the computer tool.

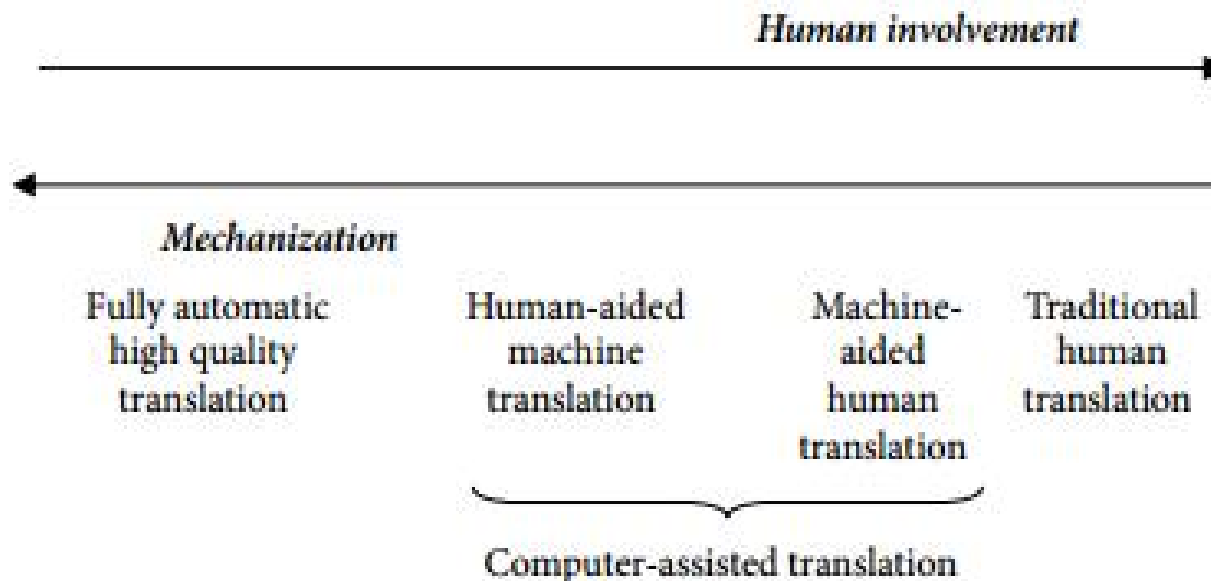


Figure 1. Hutchins and Somers' scale for measuring translation automation (1992)

Automation of the translation process

- The term traditional human translation is understood to refer to translation without any kind of automation, as it has been carried out for centuries.
- **Fully Automatic High Quality Translation (FAHQT):** means translation that is performed wholly by the computer, without any kind of human involvement, and is of “high quality”, a goal that was then seen as utopian and remains so even today if no controls or restraints are applied to the language in the texts.

Automation of the translation process - HAMT

- **Human-Aided Machine Translation (HAMT):** refers to systems in which the translation is essentially carried out by the program itself, but aid required from humans to resolve specific language problems arising from the source text, or to correct the resulting target text.
- **Machine-Aided Human Translation (MAHT):** comprises process or degree of automation in the translation process, provided that the mechanical intervention provides some kind of linguistic support.

MAHT (Machine-aided human translation)

- **Thus, MAHT includes things like:**
 - Spelling,
 - Grammar and style checkers,
 - Dictionaries,
 - Encyclopedias and ...
 - ...other sources of information that translators can consult either online or on some other computer-readable support.

MAHT (Machine-aided human translation)

- It also contains the systems that make use of these tools and go to constitute a work environment that allows the translator to handle the source and the target texts, as well as the storage and retrieval of translations — in other words, what is known as the translator's workstation.
- Another classification that ties in with this approach is the one put forward by Melby (1983, 1996).
- **It is based on a distinction between Level-One and Level-Two tools:**

Level-One tools

- **Level-One tools** include:
 - voice-to-text systems,
 - word processors,
 - fax machines,
 - e-mail and other telecommunications,
 - word-count and terminology management software.
- With the aid of these tools, translators can almost eliminate the distance separating them from their clients and thus compete with a local translator.

Level-Two tools

- Level-Two tools require the source text to be in machine-readable form.
- They include terminology research and automatic equivalence lookup, translation memories and quality-check tools.

Translation Memory - TM

Human translator

works on Text A → database →

Human translator

works on Text B

Machine Translation (MT)

Computer

translates text A  human

translator post-edits (corrects)

Translation Memory (TM) tools

- Wordfast
- DejaVu
- SDL TRADOSSTUDIO
- Star Transit.

Looking to the future

The key to evaluating translation technology is providing:

1. Various tools,
2. Backing up practice with theory,
3. Placing the use of Translation Memory (TM) tools firmly in the broader context of other types of translation technology, and ...
4. Beginning to imagine future developments in the field...



THANK YOU